

Amendments to the Specification:

Please replace the paragraph at page 140, line 57 through page 141, line 15 with the following paragraph:

```
-- >af161504 (TOXMARKER Assignment: 97; SEQ ID NO: 131 154)
gggtgccttatgcggtgatttttaatgataggtgtcatatataggacggagtaatctgttta
cattctgttcttctcgcagtcactcacaagcgggtaactaggtgacaagaaaacaaagatc
ttattcaaaagaggtcttacagcaacccaacgtctcatcttcccatagtaaagatgacgg
cgcttgaggtaagctacaggcaacaccacttccgcgtttctcttgcgccttggtccaag
atggcggatgaagccacgcgcagctgttgtgtctgagatcccgggtgctgaagactaacgcc
ggaccccgagatcgtgagttgtgggtgcagcgcactgaaggaggaatatcagtccttatc
cggtatgtggagaacaacaagaatgctgacaacgattgggtccgcactggagtgccaacaag
gaagggaactcgggtgggttggaaaaatgctgggtatatccatgacctcctgaaatatgagttt
gacatcgagtttgacattcctatcacatatcctactactgccccagaaattgcagttcct
gagctggatggaaagacagcaaatgtacaggggtggcaaaatatgcctgacggatcat
ttcaaacctttgtgggccaggaatgtgcccaatttggactagctcatctcatggctctg
gggctgggtccatggctggcagtggaatccctgatctgattcagaagggcgtcatccac
cacaagagaaatgcaaccaatgaagaatcaagccactgaggcagggcagagggaccttt
gtagggtcacgatactattttcctgtgcatcacacttaactcatctaactgcttccccgg
acacctccacctctagttgttactaagtagctgcagtaggcattgctggggaagaaaca
aacacacaccaaacagtagtctacttagtttctaaggctgcacaggggaagggaaagact
gggctttggacaatctagaggtaatttatatccgccccaggtggagcaacatgcgattc
tggaggcacggggtaactgaaagtgagtacatatagttcttctgggttctggagataac
ccatcaataaaagctgcttccctctggtaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa --
```

Please replace the paragraph at page 145, line 44 through page 146, line 6 with the following paragraph:

```
-- >aj242973 (TOXMARKER Assignment: 49; SEQ ID NO: 139 140)
gcggccgcgtcgacgtgacagccggtacgccccgggttgggcaacctcgattacgggcgg
cctccaggccccgcagcagcgcgcccgcccgccccgcgccttgccgcccccggtt
ccggccgcggacccccactctctgcggttccggctgcggctccgctgcggtagcgccgtc
ccccgggaccaccttccggtggcgccctcccatgctctcgccacccggagggcttgcc
agtcctcctcctccacagcctctttcccgctcccgaggatgggcaactcggcctcgaaca
tcgtcagccccagggagccttgccgggcccgaaggaaacagaccctgtagcggcctaac
atcatgtcaatggcaacagaacagtcgaacctttccagaggggaacacagatggctgtat
ttggaatgggatgtttctggggagctgaaaggaaattctgggtcttgaaaggagtgtatt
caactcaagttgggttttgcaggaggctatacttcaaatcctacttataaagaagtctgct
cagaaaaaactggccatgcagaagtgcgtccgagtggtgtaccagccagaacacatgagtt
ttgaggaactgctcaaggtcttctgggagaatcacgacccgacccaaggtatgcgccagg
ggaacgaccatggcactcagtaccgctcgcccatctacccgacctctgccaagcaaatgg
aggcagccctgagctccaaagagaactacaaaaaggttctttcagagcacggcttcggcc
ccatcactaccgacatccgggagggacagacttttactatgcggaagactaccaccagc
agtacctgagcaagaacccaatggctactgcggccttgggggacccggcgtgtcctgcc
cagtggttataaaaaataattgtccccacatggtgggcctttgaggttccagtaaaaa
tgctttcaacaaattgggcaatgcttgtgtgattcaccaatcgtggcatttaaagtgcaca
```

McCabe , et al.
U.S.S.N. 10/663,418

aagtacaaaggaattttatacagattgggtttaccgaagtataatctataggaggcgcgat
ggcaagttgataaaatgtgacttatctcctaataagttatgggtgggagtgagctgtgcg
gtttcctgtgtcttctggggtctgagtgaagatagcagggatgctgtgttcaccccttctt
ggtagaagctaaggtgtgagctgggaggttgcctggacaggatgggggacccagaaagtc
tttatctgtgctctctgcccgcagtgccctacaatttgcaaactgtatagcctcagtg
actcattcgctgaaatccttcgctttacca--

Please replace the paragraph at page 148, lines 13-42 with the following paragraph:

-->ak026121 (TOXMARKER Assignment: 44; SEQ ID NO: 141 ~~138~~)
agttgctgtggaggccctggcagcggtgcagcaggggtgtgagcgccaccggtgcccacct
tctggacctggcaggcagcgccggtgcgactgggagctggcgtagccctctgagccaca
ggagccgctggtgcaggacctgcaggctgctgtggccgccgtccagagtcccggtccacga
gctgttgaggtttgcccgcagcgcggtgggcaatgctgcccacacatctgaccgtgccct
gcatgccaaagcttagccggcagctgcagaagatggaggacgtgcaccagacgctgggtggc
acatgggtcaggccctcgacgctggccggggaggctctggagccacccttgaggacctgga
ccggctgggtggcctgctcgcggtgtgcccagggacgccaagcagctggcctccttctt
gcacggcaatgcctcactgctcttcagacggaccaaggccactgccccggggcctgaggg
gggtggcaccctgcaccccaaccccaactgacaagaccagcagcatccagtcacgaccct
gccctcaccccttaagttcacctcccaggactcgccagatgggcagtagcagaacagcga
ggggggctggatggaggactatgactacgtccacctacaggggaaggaggagtttgagaa
gaccagaaggagctgctggaaaagggcagcatcacgcggcagggcaagagccagctgga
gttgacagcagctgaagcagtttgaaacgactggaaacaggaggtgtcacggcccatagacca
cgacctggccaactggacgcccagcccaacccctggccccggggcgaaacaggcgccctggg
gccctcggaaccggcagctgctgctcttctacctggagcagtgtagggccaacctgaccac
actgaccaacgcctggacgccttctttaccgccgtggccaccaaccagccgcccagat
ctttgtggcgcacagcaagttcgatcctcagcgcccaagctggtgttcatcgggga
cacactgtcacggcaggccaaggctgctgacgtgcgacagccaggtgacccactacagcaa
cctgctgtgcgacctcctgcgcggcatcgtggccaccaccaaggccgctgccttgagta
cccacgccttccgcggccaggacatgggtggagagggtaaggagctggggccacagcac
ccagcagttccgcgcgctcctaggccagctggcagccgctgaggggtggtgacccagga
gggaggcaggggaggggtgcggcggtcccagctccctggctcccatgtcaagagtcgctg
tgccacaggcttagggacaggacccagctctgcgtcggtcctgggtgccctggatgccc
ggaatctgtatatatttatggccgggcaggggtgtggggccatgcctcctcaggagccgaa
gccaggggccggccagtgccctccccagcatgcaccacggggcccggttgggtcacca
gacggggctggagtgtgagggctcctgcagcctgcaggacctcgtgccaccccgagggtg
agcctggtcccacgaggggtgcctgtcccctgacagggccagtgagtttggtgtgcct
ccgctttccaggagaagaacctgaagaactatttttcgttattgggtttccaatcattt
gactaagagctcctcatttaaataaagtttttaaaaggaaaaaaaaaaaaaaaaaaaa--

Insert the enclosed sequence listing, pages 1-86, at the end of the specification.